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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.
08/884,573 06/27/97 SWANSON R 2500

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LM01/1008

EXAMINER
TLING, K

ART UNIT PAPER NUMBER
2773

2
DATE MAILED: 10/08/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

884,573

Applicant(s)

Swanson

Examiner

K. Tung

Group Art Unit

2773

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on 6-27-97
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☐ Claim(s) 1-29 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-17, 19-29 is/are rejected.
- ☒ Claim(s) 18 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of References Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
2. The disclosure is objected to because of the following informalities: page 9, line 24, "2B" should be --2D--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17 and 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted Prior Art, Fig. 1 of the drawing (hereinafter "Prior Art") in view of Nishide (5,721,885).

Prior Art teaches a system (Fig. 1) comprising a CPU (80); a display processor (60); a video controller (20); a CRT monitor (30); a bus (50); and a system memory (40) includes an address

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decoder (46) and a frame buffer portion (45). However, Prior Art fails to explicitly teach a remapping device for converting a first address to a second address. This is what Nishide teaches (Fig. 2, paging or TLB 135; and col. 5, lines 37-50). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of Nishide into the system of Prior Art in order to increase the access efficiency to the frame buffer. Therefore, claims 1-3, 5-7, 10-15, 19-22, 24-25 and 27-28 would have been obvious.

Claim 4 requires the phantom port has a span size equal to a power of two which would be obvious of, if not inherent to, due to the teachings of TLB 135 of Nishide because the size of the buffer is always equal to a power of two.

Claims 8-9, 16-17, 23, 26 and 29 are similar in scope to claim 4, and thus is rejected under similar rationale.

Allowable Subject Matter

5. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art made of record fails to anticipate or make obvious the claimed invention. Specifically, the prior art fails to teach, in combination with the remaining steps, removing a quantity of bits from ... and concatenating with the result of f) bits ... as recited in claim 18.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang et al (5,745,739) teaches virtual coordinate to linear physical memory address converter for computer graphics system.

Responses

8. Responses to this action should be mailed to:

**Commissioner of Patents and Trademarks
Washington, D.C. 20231.**

If applicant desires to fax a response, (703) 308-9051(52) may be used for formal communications or (703) 305-9724 for informal or draft communications.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

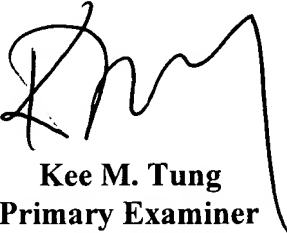
Inquires

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kee M. Tung** whose telephone number is (703) 305-9660. The examiner can normally be reached on **Monday - Thursday from 7:30 am to 5:00 pm**. The examiner can also be reached on alternate **Friday**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matt Kim**, can be reached on (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

September 11, 1998


**Kee M. Tung
Primary Examiner
Art Unit 2773**